

Steric structure of phosphorus-containing heterocycles - Communication 11. Aryl pyrocatechinphosphites

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Abstract

1. Para-substituted phenyl pyrocatechinphosphites were synthesized and their dipole moments and Kerr constants were determined. 2. A nonplanar structure of the benzodioxaphospholene ring with a dihedral bend angle of 155° and an axial phenoxyl substituent, gauche-oriented relative to the unshared pair of the phosphorus atom, was established from the joint examination of dipole moment data for the three p-X-aryl pyrocatechinphosphites. 3. Using the Kerr effect a change in orientation of the benzene ring was established upon going from pyrocatechin phenylphosphite to the o,o,p-tritert-butylphenyl derivative. © 1976 Plenum Publishing Corporation.

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